WHAT IS CLAIMED IS:

- 1. An exercise bicycle comprising:
- a frame having a base, a driven member having an end pivotably connected to said base, and a contacting portion positioned on said driven member; and
 - a driven wheel stationarily rotatably connected to said base and having a rolling face contacted with the contacting portion of the driven member for driving said driven member to reciprocatingly pivot to said base when the driven wheel is driven to rotate.

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- 2. The exercise bicycle as defined in claim 1 further comprising a driving wheel stationarily rotatably connected to said base, a crank connected at an end thereof to the driving wheel, a pedal connected to the other end of the crank for the user's leg pedaling, a saddle connected to the other end of the driven member, and a belt; wherein said driven wheel is a cam having a cylindrical axial neck protruded at a side thereof; said belt running on said driving wheel and said axial neck of the driven wheel; said contacting portion is formed of a roller that is rotatably connected to said driven member.
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- 3. The exercise bicycle as defined in claim 2, wherein said driven wheel is an eccentric wheel having a circular outer edge forming the rolling face; said roller engages against said rolling face of said eccentric wheel.
- 4. The exercise bicycle as defined in claim 2, wherein said driven wheel is adiscoid cam having an outer edge forming said rolling face; said roller engages against

said rolling face of said discoid cam.

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- 5. The exercise bicycle as defined in claim 2, wherein said driven wheel is a face cam recessed at a side thereof with an annular ditch forming said rolling face; said roller is received in said annular ditch to engage an inner periphery of said annular ditch at an outer edge thereof.
- 6. The exercise bicycle as defined in claim 2, wherein said driven wheel is a ribbed cam having an annular rib around an outer edge thereof forming said rolling face; said contacting portion is formed of two rollers respectively engaging against an inner periphery and an outer periphery of said annular rib.
- 7. The exercise bicycle as defined in claim 2, wherein said driven wheel is rotated along with the driving wheel driven by the user's legs pedaling said pedal.
- 8. The exercise bicycle as defined in claim 2, wherein said driving wheel further comprises an active gear, said exercise bicycle further comprising a motor for driving a passive gear in mesh with said active gear to rotate and further driving said driving wheel and said driven wheel to rotate synchronously.
- 9. The exercise bicycle as defined in claim 2, wherein said frame comprises a handrail, said handrail being fixedly connected with said driven member at an end thereof.
- 25 10. The exercise bicycle as defined in claim 1, wherein said driven wheel is a

cam and is connected with a crank and a pedal for the user's legs pedaling, said driven wheel being rotated by the user's legs pedaling.

11. The exercise bicycle as defined in claim 1, wherein said driven wheel is a cam and is connected with a crank and a pedal for the user's pedaling; the exercise bicycle further comprising an active gear being coaxially mounted at a side of said driven wheel, a motor driving a passive gear in mesh with said active gear to rotate and further to drive said driven wheel, said crank, and said pedal to rotate.